



specializing in “AIR CONDITIONING, PARTS AND SYSTEMS” for your classic

“PERFECT FIT SERIES”

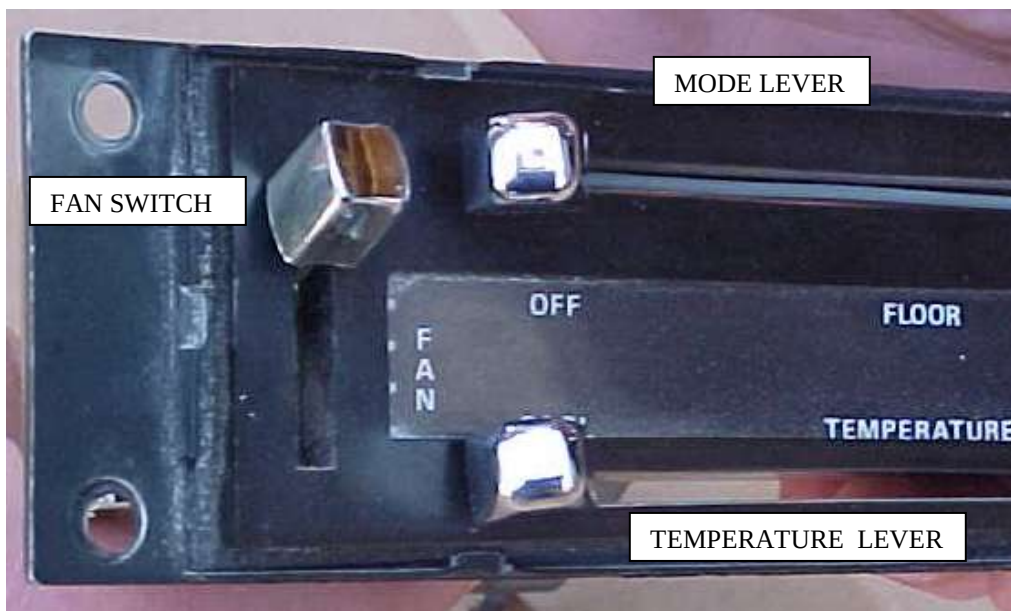
IN-DASH

HEAT/ COOL/ DEFROST

1969-70 MUSTANG

CONTROL & OPERATING INSTRUCTIONS

The controls on your new “Perfect Fit” system. Offers complete comfort capabilities in virtually every driving condition. This includes Temperature control in all of the modes. This system also provides the ability to blend the air between Heat, and Defrost modes.



THE PICTURE YOU SEE ABOVE SHOWS THE CONTROLS IN THE FLOOR MODE. THIS MEANS THAT THE AIR WILL BE DISTRIBUTED THROUGH THE FLOOR OUTLETS. THIS ALSO HAS THE TEMPERATURE LEVER IN THE COLD POSITION. WITH THE CONTROLS IN THIS POSITION YOU WILL GET THE AIR THROUGH THE FLOOR OUTLETS AT ROOM TEMPERATURE.

CAUTION: ALL OF THE OUTSIDE VENTS MUST BE CLOSED WHEN THE SYSTEM IS IN THE A/C MODE. THIS WILL ALLOW THE A/C SYSTEM TO FUNCTION AT ITS MAXIMUM PERFORMANCE LEVEL.

THE FOLLOWING SUMMARY WILL DESCRIBE EACH OF THE CONTROL LEVERS FUNCTION.

FAN SPEED SWITCH: There are 3 speeds plus Off. When the switch is in the off position it will disconnect the 12V power to the Blower Motor and the A/C Clutch. This will shut down the entire system. When the switch is moved to any of the blower speeds 1,2 or 3 there is 12V supplied to the Micro-Switch which is mounted on the defrost air housing.

FLOOR / FACE / DEFROST MODE: When the top lever is pulled all the way to the LEFT, it will direct the air to the floor ducts. When the lever is moved into the CENTER position the air is directed to the Dash Louvers. When the lever is pushed to the far Right, the air will be directed onto the defrost outlets. When the lever is in the Defrost position the A/C Compressor is activated and provides Dehumidification.

TEMPERATURE CONTROL: The temperature lever as shown is in the COLDEST temperature position. As the lever is pushed to the right the temperature of the discharged air will rise to the HOTTEST point.

Note: The temperature lever will function in any of the modes.

AIR CONDITIONING MODE: The picture shows the controls in the Floor Mode (air-flow out the floor outlets).

When Air Conditioning is required the compressor clutch must be activated. This is accomplished when the top lever is in the Center position. When the compressor is activated the Temperature Lever will control the air from maximum cold through maximum heat.



specializing in "AIR CONDITIONING, PARTS AND SYSTEMS" for your classic

INSTALLATION INSTRUCTIONS

1969-70 MUSTANG

Congratulations! ! You have just purchased the highest quality, best performing A/C system ever designed for you Classic Car. To obtain the high level of performance and dependability our systems are known for, pay close attention to the following instructions.

Before beginning the installation check the box for the correct components.

Evaporator
Face Duct Assembly
Defrost / Heat Duct Assembly
Inlet Air Block Off Assembly
Firewall Block Off Assembly
Flex Hose 2 ½" dia. (1) 2', (1) 3', (1) 4'
Flex Hose 2" dia. (1) 2', (1) 3'
Sack Kit Hardware
Sack Kit Control

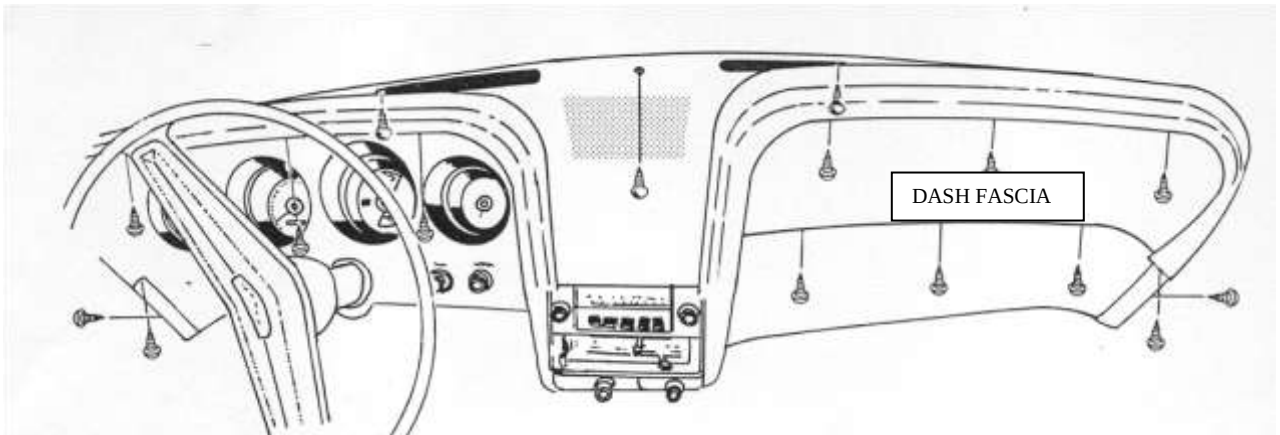
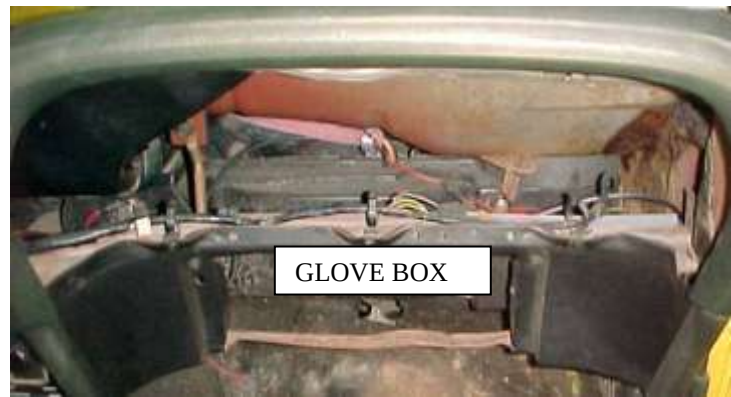
IMPORTANT INFORMATION

1. Before starting, read the instructions carefully and follow proper sequence.
2. Check condition of engine mounts. Excessive engine movement can damage hoses to A/C, heater, radiator, transcooler, and power steering systems.
3. Before starting, check vehicle interior electrical functions. i.e. interior lights, radio, horn, etc. When ready to start installation, disconnect battery.
4. Fittings. Use one or two drops of lubricant on O'rings, threads and rear of bump for O'ring where female nut rides. Do not use thread tape or sealants.
5. Always use two wrenches to tighten fittings. Try holding in one hand while squeezing together while other hand holds fitting in position.
6. Shaft seals in a small percentage of compressors will require as much as 3-4 hours run time to become leak free.
7. Compressors supplied in our complete systems are filled with proper amount of oil.
8. Compressor requires technician to hand turn 15-20 revolutions before and after charging with liquid from a charging station before running system. Compressors with damaged reed valves cannot be warranted.
9. Should you have any technical questions, or are suspect of missing, or defective parts, call us immediately. Our knowledgeable staff will be glad to assist you.

YOU CAN NOW BEGIN THE INSTALLATION

Remove Glove box, Passenger Fascia, and Padded Dash Cover
Retain original hardware.

See below for screw locations.



Remove radio mounting bracket and the original control head.

Following steps are required to remove the radio mounting bracket.

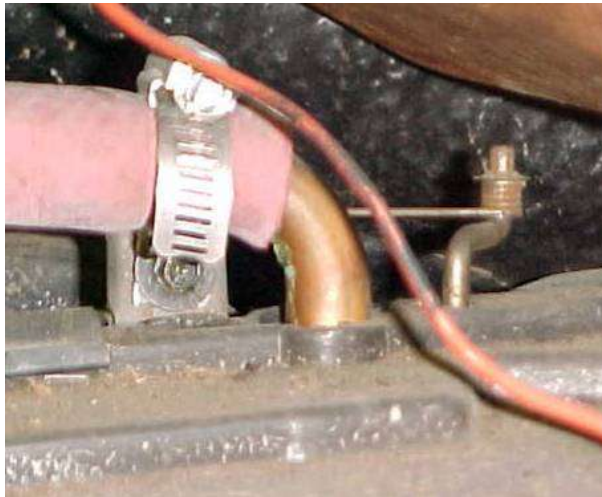
Remove the radio knobs and (2) screws above the radio. Carefully pull the radio bezel away from the dash. The bottom of the bezel inserts into clips.



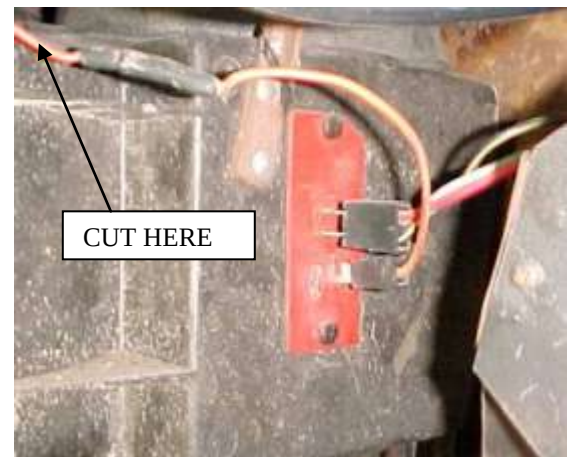
Remove the (5) screws as shown.
The (2) screws on the left and right are used to attach the plastic trim sections.

Remove and retain the original hardware.

Removal of the control head requires disconnection of the Mode Control cable. This is located below the defrost duct.



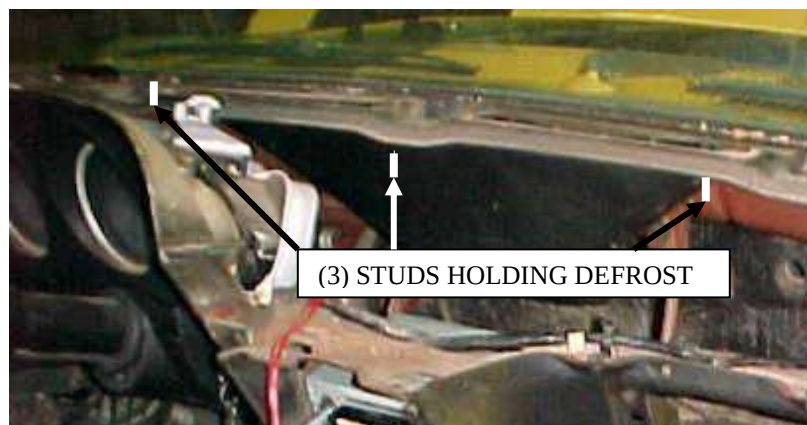
Located behind glove box opening and on front of the heater is a resistor assembly. Disconnect wires and cut off the single wire to the blower motor.



Remove the Defrost Air Duct along the body flange.

Remove the (3) nuts. Retain original hardware.

Set aside for modification.



Locate blower motor on the firewall (Passenger Side) in engine compartment. Remove 5 nuts around blower. Also disconnect electrical connector from the blower motor.

Cut wires at grommet in firewall.

DRAIN COOLANT FROM RADIATOR.
Cut Heater hoses approximately 1" from firewall.



Remove the screw that is located just in front of the air inlet to the heater.

Retain original hardware.

Picture to the right shows the heat distribution duct attached to bottom of the heater. This picture shows heater assembly outside of the vehicle. The heat duct must be removed while in the vehicle.

Remove push pins.

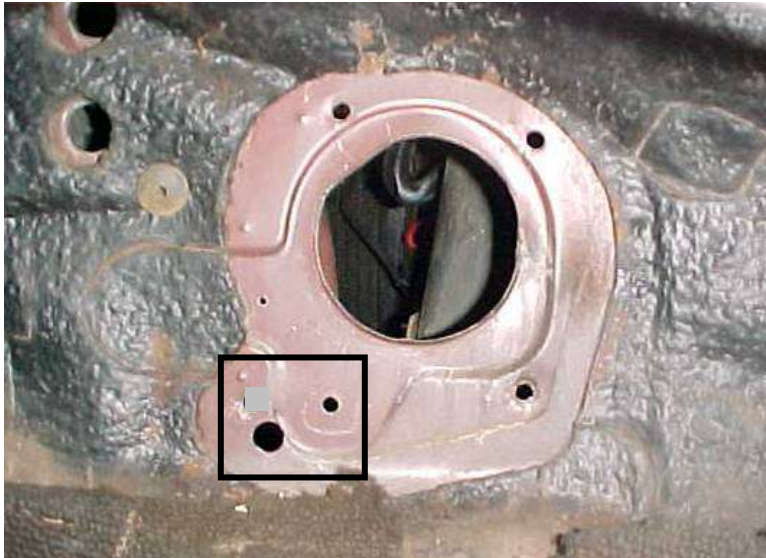


Locate on the right side of lower dash. (2) bolts. (1) inside glove box opening and into the kick panel. (1) under glove box opening and into a bracket.

Remove and retain hardware.



Pull lower edge of the dash towards the rear of car to allow clearance for the heater assembly.
Remove complete Heater Assembly and discard.



Located on page 25 of instructions is a template. Carefully cut out the template and place it over the hole in firewall behind glove box.

Drill (1) hole 5/16" dia., and
(1) hole 3/4" dia..

SEE NOTE BELOW BEFORE DRILLING.

Caution: on the engine side of firewall there is a brake line. Do not drill through. It may be necessary to carefully relocate this line.



5/8" Dia hole

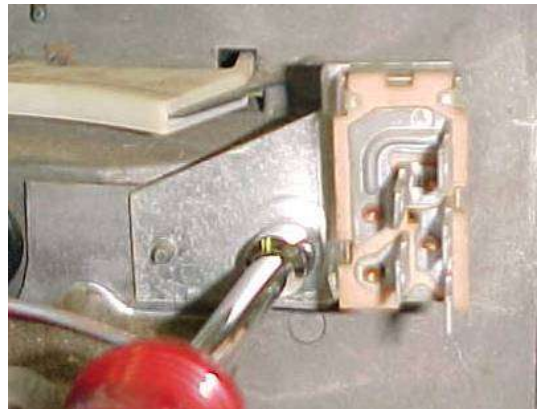
Brake line

Locate original wiring harness that was connected to original blower switch. From the plug cut the YELLOW wire and attach a ¼" insulated male spade connector.



All modifications to the vehicle are complete. You can now begin installing your Classic Air "Perfect Fit Series" system.

Locate the original control head. Remove original blower switch and the mode control cables. Discard switch, switch knob and the cables. Retain original hardware.



In the control sack kit you will find the control switch mounting bracket. Attach bracket using original screw that holds rear section of the control head to the front section.

Locate the new Blower Switch, and (2) #6 x 3/8" Pan Head Screws. Attach switch as shown.





Locate knob in control sack kit and install over switch shaft.



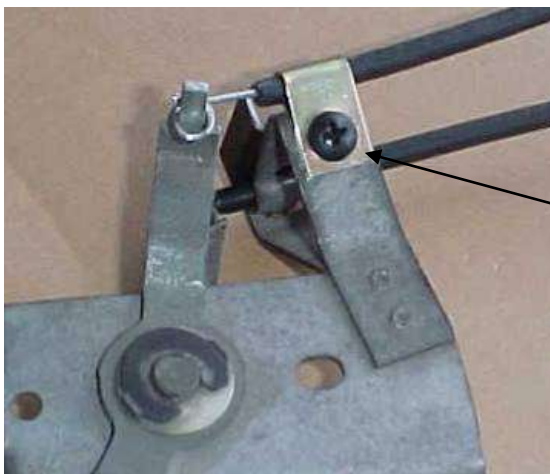
Locate in the control sack kit (2) cables.

Longest one is for the Temperature lever . Attach with (1) #8 x 1/2" pan head phillips screw and the cable clamp provided.

Short cable is attached to the mode control lever. Hold cable over edge of the control head as shown below. Mark and drill a 1/8" Dia. hole and attach the cable with (1) #10 x 5/8" pan head phillips screw.



CABLE CLAMP



Drill 1/8" Dia hole.

Set aside for later installation.

Locate the Inlet Block off Plate.

Located above glove box opening place block off plate over the hole. Attach with (2) #10 x $\frac{3}{4}$ " hex washer head tek screws.



Locate Evaporator. Slide evaporator up into place behind the glove box opening.



From engine compartment attach evaporator using $\frac{1}{4}$ - 20 x $\frac{5}{8}$ hex head screw with $\frac{1}{4}$ " washer through the $\frac{5}{16}$ " Dia. hole previously drilled.

Behind glove box opening attach the blower support bracket as shown.

Attach with the original screw as shown. Behind original screw you will find an additional hole in the support bracket. Install a #10 x $\frac{3}{4}$ " hex washer head tek screw through this hole and into the cowl.



Locate in the hardware sack kit the evaporator Support Bracket.

Attach bottom end of the bracket to the (2) 1/8" Dia. holes in front of the evaporator using (2) #10 x 5/8 pan head Philips screws.as shown.

Holding the unit level attach top end to the cowling using (1) #10 x 3/4: hex head tek screw.

Tighten all screws.



Locate the Firewall Block Off Plate.

On engine side of firewall attach over the hookup tubes from evaporator using (2) #10 x 5/8 " hex washer head Tek screws.

Locate insulation tape provided and seal around the hookup tubes as shown.

Water Valve / (3) hose clamps.

Locate the Water Valve and (3) worm gear clamps.

Supply line from the engine is attached to the lower heater hookup tube. Cut 6" off the end of return line and install the water valve using (3) worm gear clamps as shown above. See Techinal Data sheet on page 24.

Note: It is recommended that you replace heater hoses from the engine to the hookup tubes.

Locate the 1/2" Dia. x 6" long piece of clear drain tube.

Insert through 11/16" Dia. hole previously drilled and attach over drain nipple on the evaporator. Using the insulation tape seal around tube.



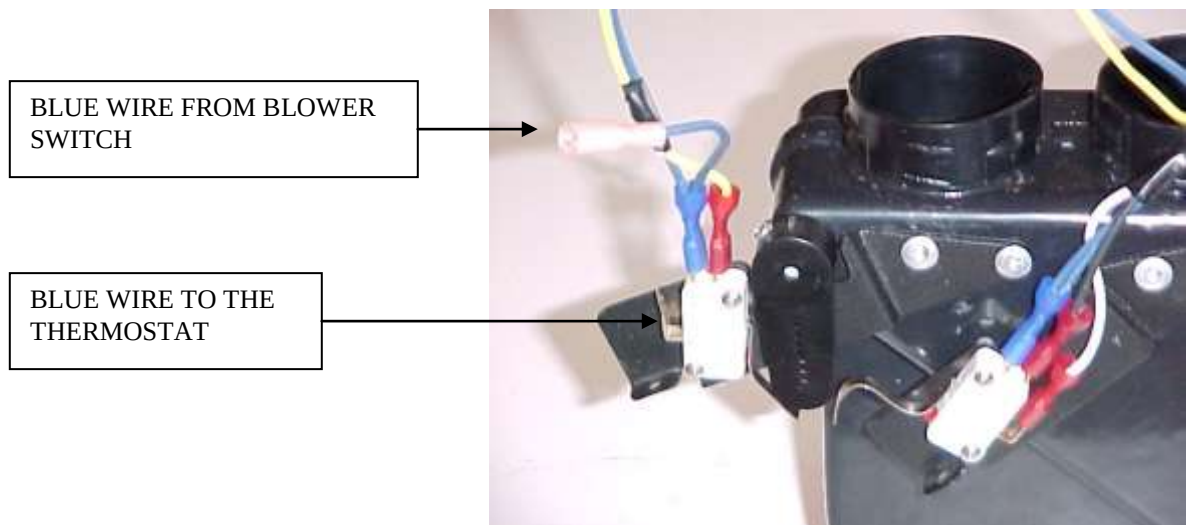


Locate the Defrost / Heat Duct Assembly.

Attach to evaporator using (2) #10 x 5/8 pan head Philips screws. Be sure that the S-clips are pressed over the rear flange. This helps secure the duct assembly.

Locate 2" dia flex hose (1) piece 2' long and attach it to right outlet as shown.

Find (1) piece of 2" dia. flex hose 3' long and attach it to left outlet. Route hose down and behind the micro switch assembly.

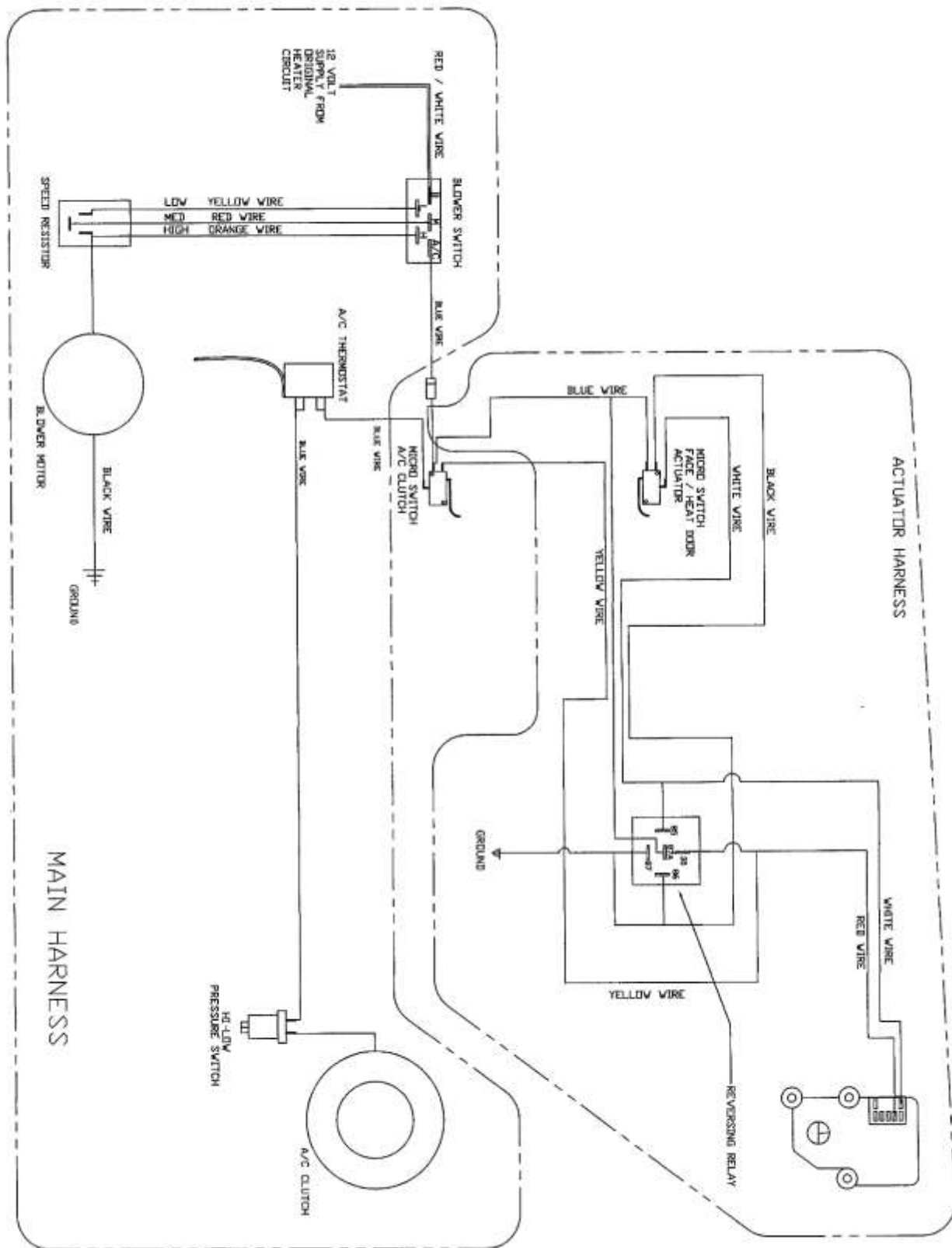


BLUE WIRE FROM BLOWER SWITCH

BLUE WIRE TO THE THERMOSTAT

Locate wire harness from the evaporator electric actuator and attach to the (2) micro switches. Refer to the wiring diagram on next page.

Attach Wire Harness supplied in unit to the blower switch. Route harness through the control opening. Attach wire harness to left micro-switch on Defrost Duct assembly. Route harness across top of the unit and hookup the resistor, and blower motor. Route the blue clutch wire over evaporator and out through hole in the firewall block off plate.

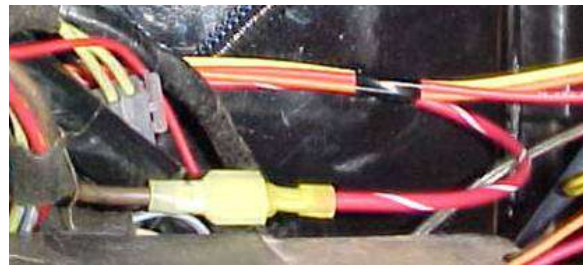




Secure ground from the electronic actuator and the blower motor using (2) #10 x ¾" hex washer head Tek screw.

REFER TO THE WIRING DRAWING ON PAGE 11 FOR PROPER CONNECTIONS.

Connect power wire (yellow / from the original harness) to Red / White stripe wire from the new harness supplied.



Route longest of (2) cables that were attached to the control head, around and over top of radio and then back and behind evaporator assembly and out through upper hole that the original heater hose was inserted through. Attach this cable to the water valve.

Set control lever in the Cold position and be sure that the water valve is closed.

Locate in the hardware sack kit (2) 1" dia. cap plugs. Cut a slot in one of the plugs and slide it over the temperature cable. Push on over heater hole. Install second cap plug over the lower hole.

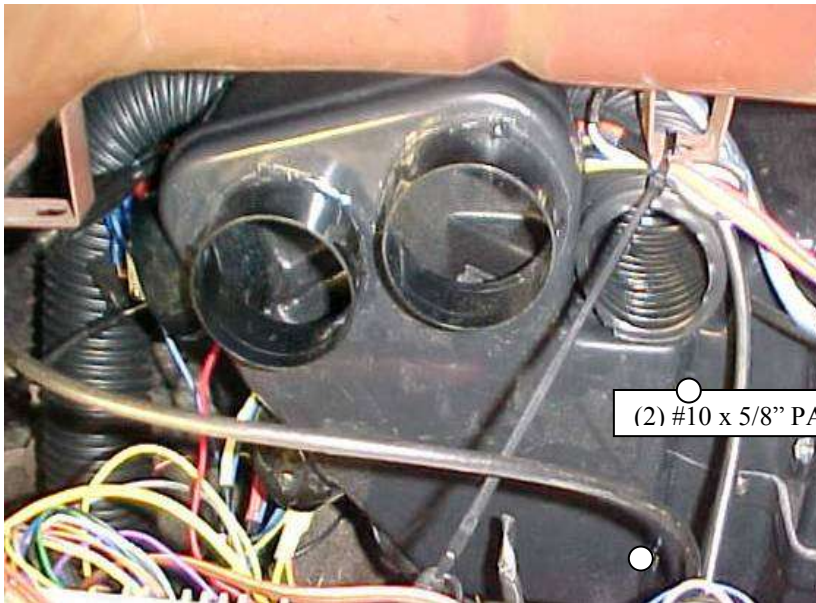




Route shortest of (2) cables and attach to the defrost / heat duct.
Insert cable into second hole from the bottom.

Attach using (1) #10 x 5/8" pan head philips screw.

Reinstall controls into instrument panel using the original hardware.
Reinstall radio mounting bracket, and bezel using original hardware.



(2) #10 x 5/8" PAN HEAD

Locate the Face Duct Assembly. Attach to the evaporator. There are s-clips on the back edge of the face duct. Make sure that they slide over the flange on the evaporator.

Attach using (2) #10 x 5/8" pan head phillips screws.

Locate Defrost Air Duct lay on table and mark a line 4" from the top lip as shown.

Cut off lower part of the duct
And discard.



Locate in the hardware sack kit (1) piece of $\frac{1}{4}$ " x $\frac{1}{2}$ " open cell seal. Attach to cut edge of the original defrost duct.



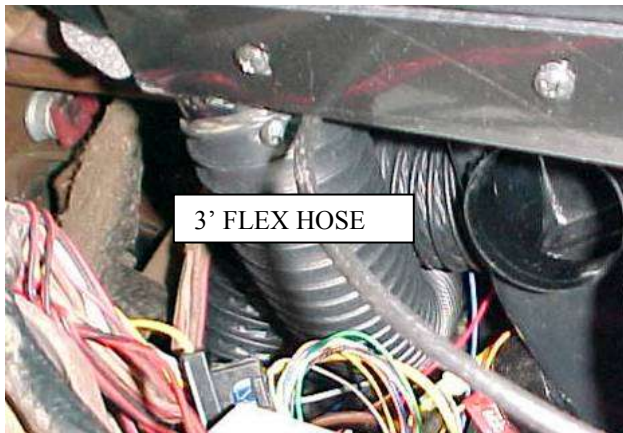
Locate the Defrost Hose Adaptor supplied. Attach over end of the defrost duct using (4) #10 x $\frac{5}{8}$ " pan head screws.

Reinstall defrost duct assembly using original hardware.

Locate (2) 2" dia flex hose attached to the Defrost assembly. Secure with (2) #10 x $\frac{5}{8}$ " pan head screws.

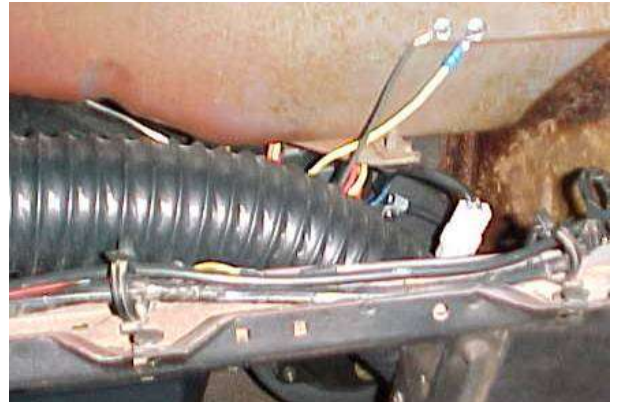


Route over the face duct and attach to the hose adaptors as shown.



Locate the 2 ½" dia flex hose (1) piece 3' long and attach it to outlet behind the left defrost flex hose.

Route across to the left side of the steering column for the drivers louver assembly.



Locate 2 ½" dia. flex hose and (1) piece 2' long and (1) piece 4' long.

Attach 2' piece to the left hose adaptor as shown.

Attach 4' piece to the right hose adaptor and route across top of glove box and down the right side and attach to passenger side louver assembly.

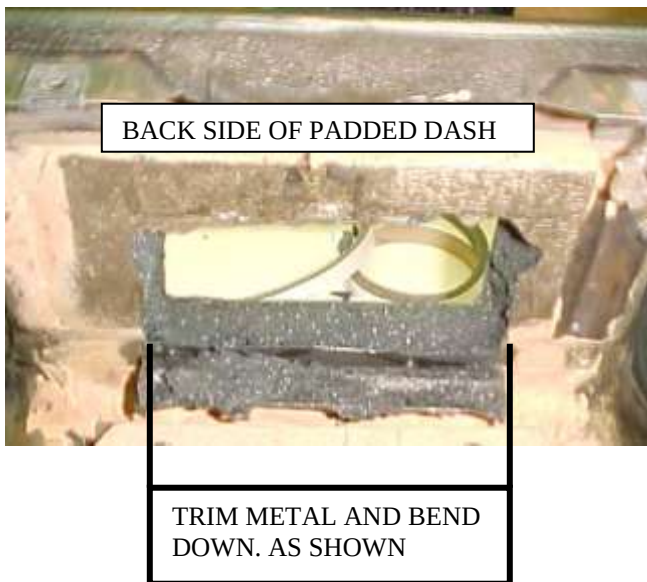
Locate the Template on page 27 of instructions. Carefully cut Template as described.



Carefully tape template from the bottom edge and center of the Padded Dash.

Cut opening to the exact size as the template.

CAUTION: PADDED DASH IS VERY DELICATE. ALWAYS CUT THE HOLE SMALLER THAN REQUIRED AND THEN DO A FINISHING CUT.



Place the Dash Panel on its face and trim the metal part along the sides. Bend metal down to gain clearance for the louver.





Locate in the Hardware Sack Kit the Center Louver. Insert louver through the cut hole.

Using a straight edge carefully insert between the louver and the dash pad and push the pad out even with the louver bezel.

Reinstall Padded Dash using original hardware.

Attach 2' piece of hose to the louver as shown.



Locate original Glove Box Assembly.

Modify back edge of the box for clearance on the evaporator.

Cut 1" horizontal and 1" vertical across the entire back of box.

Reinstall Glove box and Passenger Fascia using original hardware.



Located on page 29 & 31 of instructions the driver and passenger louver template.

On drivers side follow instructions on template and attach to dash as shown. Cut center using template as a guide.

On passengers side follow instructions on template and attach to dash as shown. Cut center using template as a guide

Locate in hardware sack kit (2) of the Louver Assemblies.

Attach assembly through passenger side hole and screw hose adaptor onto louver.

Attach 4' piece of flex hose to rear of housing and over hose adaptor.

Attach assembly through drivers side hole and screw hose adaptor onto louver.

Attach 3' piece of flex hose to rear of housing and over hose adaptor.



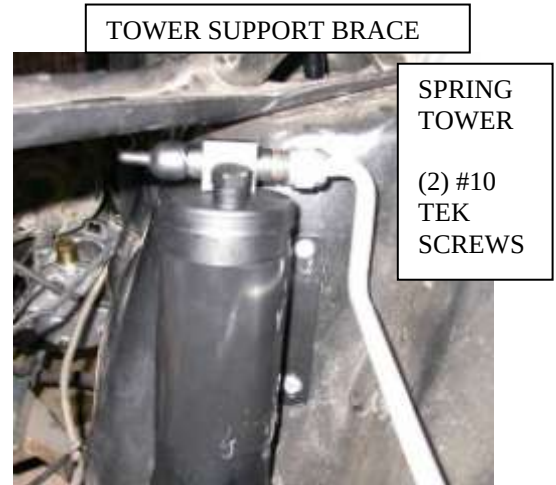
Caution: Carefully check under the Instrument Panel for all cables, electrical harness, or Flex Ducting that might interfere with the safe operation of the vehicle. Make sure that you cycle the Windshield Wipers to insure proper clearance of mechanism.

Locate in the Condenser kit the Drier, Drier Mounting bracket, pressure switch kit, Liquid Tube, (2) #10 tek screws, and (2) #6 o-rings.



To locate the drier use the liquid tube from firewall to the spring tower as shown. Attach using (2) #10x $\frac{3}{4}$ " tek screws.

Install tube using the (2) #6 o-rings and few drops of mineral oil.

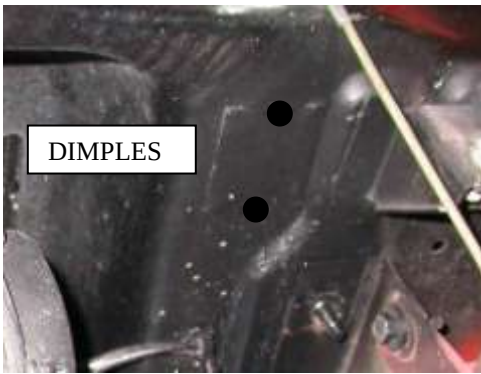


Attach the pressure switch to the top of the drier using a few drops of mineral oil.

INSTALL COMPRESSOR AND MOUNTING HARDWARE USING INSTRUCTIONS SUPPLIED WITH KIT. BE SURE THAT COMPRESSOR ON V8 ENGINE IS INSTALLED WITH FITTINGS 90 Deg. FACING DRIVERS SIDE FENDER

Remove the following components: Center Hood Latch Assembly, and (2) horns. Set aside for reinstallation.





Located on the drivers side radiator support is a knockout in the sheet metal. There are (2) dimples these are the locators for the hole cutout.

Using a 1 3/8" dia. hole saw cut (2) holes using the dimples as center of hole.



Using a hammer knockout the center as shown.

Debur hole smooth. Paint edges to prevent corrosion.

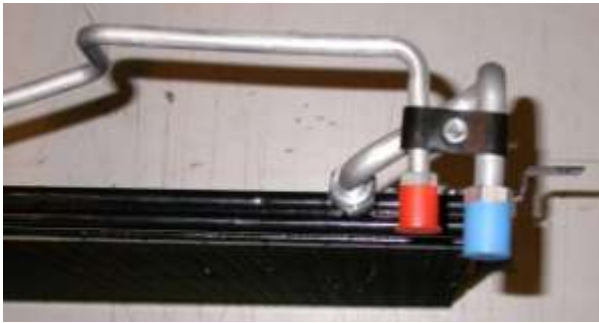


Locate the Condenser Coil, discharge tube assembly, and liquid tube assembly.
Attach liquid tube to condenser using (1) #6 o-ring and a few drops of mineral oil.
Attach discharge tube to condenser using (1) #8 o-ring and a few drops of mineral oil.



Locate (2) top and (2) lower condenser mounting brackets, and (8) #10 x 3/8" HWH screws.

Loosely attach brackets to condenser as shown.



Locate the tube support clamp assembly and attach to the tubes as shown.

Slide Condenser Assembly into place as shown. Insert the tube through the hole previously cut.



The upper attachment brackets should line up with holes already in radiator support.

Attach using (2) #14 x $\frac{3}{4}$ " tek washer head screws.

Locate #10 x $\frac{3}{4}$ " tek screws.

The lower brackets attach to the radiator support using these screws.

Tighten the (8) # 10 screws on the condenser.



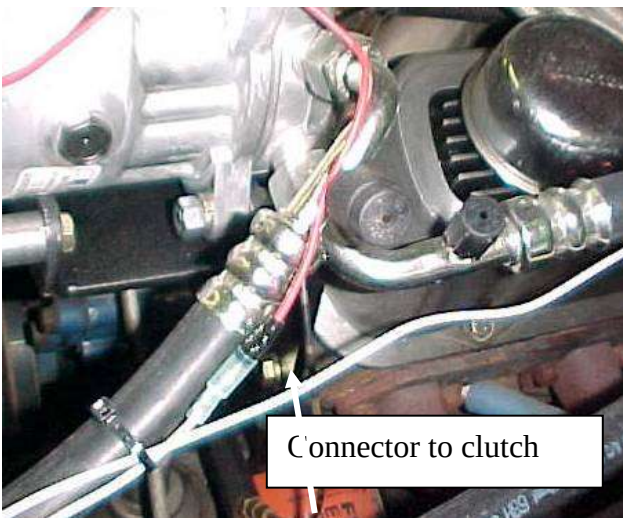
Locate the long Liquid Hose. This hose has a Straight and a 45 Degree Fitting pre crimped into position.

Loosely attach the straight end of the hose to the liquid tube, the 45 Degree end should be attached to the drier mounted on the spring tower. Attach using (2) #6 o-rings and a few drops of mineral oil. Tighten all fittings.

VEHICLES WITH V8 ENGINES:

Attach the discharge hose assembly to condenser and then to compressor.
Attach using (2) #8 o-ring using a few drops of mineral oil.

Locate the Suction Hose. The hose has (2) 90 Degree fittings pre-attached in the correct position. One of the ends has a service fitting, this should be attached to the compressor.



The other end will attach to the suction tube coming from the evaporator assembly. Check for o-rings and apply oil before attachment. Tighten all fittings.

Locate female bullet connector that is supplied with the Hi-Low pressure switch.
Cut one of the white wires from the pressure switch. Attach bullet connector to this wire and plug into the compressor clutch wire.

As shown route the long white wire from the pressure switch along the suction hose and connect to the clutch wire that was inserted through firewall.

Ty-rap suction and liquid hose to the spring tower support.

VEHICLES WITH 6 CYL. ENGINES.



Attach the discharge hose assembly to condenser and then to compressor.
Attach using (2) #8 o-ring using a few drops of mineral oil.

Locate the Suction Hose. Attach hose with 90 Degree fitting with service port to the compressor.



The other end will attach to the firewall. Use (2) #10 o-rings and a few drops of mineral oil.



Ty-rap liquid hose to the spring tower support.



***THE ENGINE COMPARTMENT OF YOUR SYSTEM IS COMPLETE.
THE UNIT IS READY FOR EVACUATION AND CHARGING.***

***THIS SHOULD BE DONE BY A QUALIFIED AND CERTIFIED AIR
CONDITIONING TECHNICIAN.***

***NOTE: COMPRESSOR IS SUPPLIED WITH THE
CORRECT OIL CHARGE. DO NOT ADD OIL TO SYSTEM.***

134a SYSTEMS 24 oz OF REFRIGERANT
Recommend that power fuse is 25 amp minimum.

**Congratulations you have completed the install of your CLASSIC AIR
“Perfect Fit Series” system.**

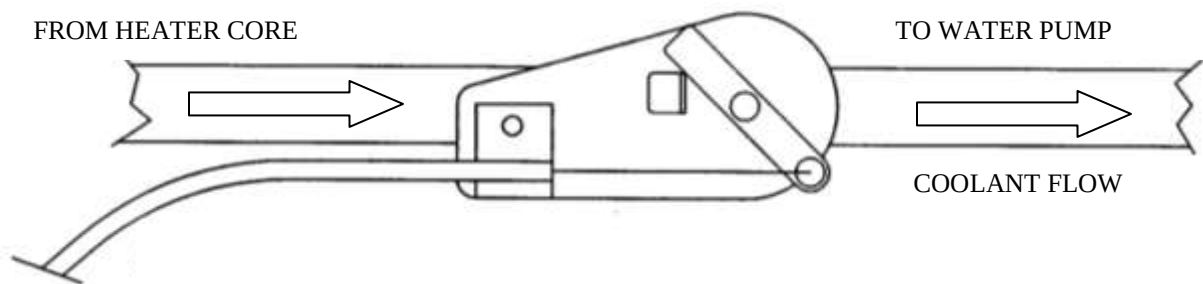
IMPORTANT

CAUTION: WATER VALVE MUST BE INSTALLED PER THE INSTRUCTIONS.

Classic Auto Air has done extensive testing on the correct method to install the water valve in order to get a repeatable and progressive temperature control.

Locate the **bottom** connection from the evaporator/heater unit off of the firewall and attach a 6" piece of 5/8" dia. heater hose with the supplied hose clamp. Next attach the inlet side of the water valve using another supplied hose clamp, (make sure the arrow on the water valve points toward the engine) Attach a heater hose from the outlet side of the water valve and route to the connection on the water pump.

NOTE: WATER VALVE = WATER PUMP



CAUTION: WATER VALVE MUST BE INSTALLED ON HEATER LINE ROUTED TO WATER PUMP.

NOTE: COMPRESSOR PURCHASED WITH KIT IS SUPPLIED WITH THE CORRECT OIL CHARGE. DO NOT ADD OIL TO SYSTEM.

***134A SYSTEMS 24 oz OF REFRIGERANT
Recommend that power fuse is 25amp minimum***